

WHAT IS CLAIMED IS:

1. A factory for manufacturing customized products in response to customer orders, the factory comprising:

5 pre-packaging facilities in which components are converted into completed products;

packaging facilities in which the completed products are packaged;

an order management system that associates  
10 individually identified products among the completed products with a customer order;

product release logic in the order management system that accumulates the individually identified products in the pre-packaging facilities and releases the  
15 individually identified products for transport from the pre-packaging facilities to the packaging facilities only after determining that substantially all of the individually identified products for the customer order have been completed.

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2. The factory of Claim 1, wherein:

the product release logic in the order management system releases the individually identified products for transport to the packaging facilities only after  
25 determining that one hundred percent of the individually identified products for the customer order have been completed.

3. The factory of Claim 1, wherein the order management system releases the individually identified products for transport to the packaging facilities by producing one or more pick reports that identify the  
5 individually identified products to be released.

4. The factory of Claim 1, wherein:  
the pre-packaging facilities comprises testing facilities; and  
10 the product release logic causes the individually identified products for the customer order to accumulate in the testing facilities until substantially all of the individually identified products have tested good.

15 5. The factory of Claim 4, wherein the order management system further comprises:  
status report logic that produces a status report indicating whether the customer order is nearing completion, such that a high repair priority may be  
20 assigned to any individually identified products for the customer order that tested bad.

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6. The factory of Claim 1, wherein the order management system further comprises:

product hold logic that receives a hold order and, in response:

5 automatically determines whether any of the individually identified products are subject to the hold order; and

automatically prevents any individually identified products subject to the hold order from being released.

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7. The factory of Claim 1, wherein:

the pre-packaging facilities are used to assemble multiple sets of products for multiple customer orders; and

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the order management system further comprises location report logic that produces a location report identifying a location for at least one product among the multiple sets of products, based on at least one product attribute.

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8. The factory of Claim 7, wherein:

the at least one product attribute comprises a unique identifier for a specific product among the multiple sets of products; and

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the location report identifies a specific location for the specific product.

9. The factory of Claim 7, wherein:  
the at least one product attribute comprises an  
order number for a specific order among the multiple  
customer orders; and

5 the location report identifies which of the products  
for the specific order are located in the testing  
facilities.

10 10. The factory of Claim 7, wherein:  
the at least one product attribute comprises a  
component of one or more products among the multiple sets  
of products; and

the location report identifies specific locations  
for the one or more products that include the component.

15 11. The factory of Claim 7, wherein:  
the at least one product attribute comprises a  
product model; and  
the location report identifies specific locations  
20 for the products that include the component.

12. The factory of Claim 1, wherein the order  
management system further comprises:  
status report logic that produces a status report  
25 identifying how many products are in the customer order  
and how many of those products have been completed, such  
that the report may be used to predict demand for  
resources in the packaging facilities.

13. The factory of Claim 1, wherein:  
the pre-packaging facilities comprise assembling  
facilities and testing facilities;  
the completed products comprise information handling  
5 systems that have been assembled in the assembling  
facilities and tested in the testing facilities;  
the packaging facilities comprise boxing facilities  
in which the completed information handling system are  
boxed; and  
10 the product release logic in the order management  
system accumulates the information handling systems in  
the testing facilities and releases the information  
handling systems for the customer order for transport  
from the testing facilities to the boxing facilities only  
15 after determining that substantially all of the  
information handling systems for the customer order have  
been assembled and have tested good.

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14. A method of manufacturing customized products in response to customer orders in a factory that includes pre-packaging facilities and packaging facilities, the method comprising:

5 assembling components in the pre-packaging facilities into multiple products for a customer order, wherein each of the multiple products is uniquely identified and assigned to the customer order;  
accumulating the multiple products in the pre-  
10 packaging facilities; and  
releasing the multiple products for transport from the pre-packaging facilities to the packaging facilities only after determining that substantially all of the multiple products for the customer order have been  
15 completed.

15. The method of Claim 14, wherein the operation of releasing the multiple products comprises:

producing one or more pick reports that identify the  
20 multiple products to be released.

16. The method of Claim 15, further comprising:

retrieving the multiple products to be released from the pre-packaging facilities for transport to the  
25 packaging facilities, based on the one or more pick reports, wherein two or more individuals retrieve the multiple products; and

producing a productivity report that identifies how many products have been retrieved by each of the two or  
30 more individuals.

17. The method of Claim 14, wherein the pre-packaging facilities include testing facilities, the method further comprising:

5 testing one or more of the multiple products for the customer order in the testing facilities;

producing a status report that identifies how many products in the customer order have been completed;

10 determining that the customer order is nearing completion, based on the status report;

identifying a product in the customer order that failed testing, in response to the determination that the customer order is nearing completion; and

15 assigning a high repair priority to the product that failed testing.

18. The method of Claim 14, further comprising:

receiving a hold order;

20 determining that one or more of the multiple products for the customer order are subject to the hold order; and

automatically preventing the products subject to the hold order from being released.

25 19. The method of Claim 14, further comprising:

assembling multiple sets of products for multiple customer orders; and

30 producing a location report that identifies a location for at least one product among the multiple sets of products, based on at least one product attribute.

20. The method of Claim 14, wherein the pre-packaging facilities include testing facilities, the method further comprising:

- 5       producing a report of vacant capacity for products in the testing facilities.

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21. A program product for managing a factory in which customized products are built in response to customer orders, wherein the factory includes testing facilities and packaging facilities, the program product  
5 comprising:

a computer-usable medium; and

computer instructions encoded in the computer-usable medium, wherein, when executed, the computer instructions perform operations comprising:

10 associating a set of products with a customer order, such that each of the products in the set is uniquely identified and assigned to the customer order;

monitoring test status for the set of products;

15 accumulating the set of products for the customer order in the testing facilities;

automatically determining whether substantially all of the products in the set have been completed, based on the test status; and

20 automatically releasing the set of products for transport from the testing facilities to the packaging facilities only after determining that substantially all of the products for the customer order have been completed, such that the program product causes one or more of the products in the set to accumulate in the  
25 testing facility after the one or more products in the set have tested good.

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